

| Ref # | Hits    | Search Query   | DBs   | Default Operator | Plurals | Time Stamp       |
|-------|---------|--|---|------------------|---------|------------------|
| L1    | 3116993 | (statistic\$8 probabilit\$8 measur\$8 stochastic\$8)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2004/11/26 11:52 |
| L2    | 2350811 | model\$8 analyz\$8 graph\$8 profil\$8  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2004/11/26 11:52 |
| L3    | 629     | (L1 near2 L2) with (real adj tim\$3)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2004/11/26 11:52 |
| L4    | 61      | L3 same (network\$5)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2004/11/26 12:12 |
| L5    | 3187    | 709/223.ccls.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2004/11/26 12:12 |
| L6    | 106     | 5 and (1 near2 2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2004/11/26 12:13 |
| L7    | 2947    | 709/225-226.ccls.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2004/11/26 12:13 |
| L8    | 103     | 7 and (1 near2 2)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2004/11/26 12:47 |
| L9    | 57      | (stream\$1 flow\$1 packet\$1 data)<br>same (statistic\$3 adj model\$5)<br>same (record\$1 event\$1 activit\$5)<br>same (updat\$5 aggregat\$5 add<br>adding addition\$2 accumul\$5) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2004/11/26 13:17 |
| L10   | 7       | fishman-v.in.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR               | OFF     | 2004/11/26 13:18 |

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| L11 | 14 | galperin-y.in.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 13:19 |
| L12 | 0  | reyenberg-a.in.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 13:19 |
| L13 | 1  | reynberg-a.in.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 13:23 |
| L14 | 1  | "5850388".pn. and (updat\$5<br>aggregat\$5 add adding addition\$2<br>accumulat\$5) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 13:33 |
| L15 | 1  | "5850388".pn. and (delet\$5<br>remov\$6 clear\$5)                                  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 13:34 |
| L16 | 2  | "4792753".pn.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 13:43 |
| L17 | 2  | "5097469".pn.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 13:44 |
| L18 | 1  | 17 and (updat\$5 adding adds<br>addition\$2 aggregat\$8<br>accumulat\$6) \         | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 13:46 |
| L19 | 1  | 17 and (updat\$5 adding adds<br>addition\$2 aggregat\$8<br>accumulat\$6)           | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 13:46 |
| L20 | 0  | 17 and (remove\$1 remov\$3 delet\$6<br>clear\$3)                                   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 13:55 |

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| L22 | 160  | (statistic\$8 near2 model\$8) and "709"/\$.ccls.     | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 13:57 |
| L23 | 9    | (statistic\$8 near2 model\$8).ab. and "709"/\$.ccls. | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 13:59 |
| L24 | 4    | rhodes-n.in.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 14:00 |
| L26 | 3926 | (statistic\$8 adj model\$8)                          | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 14:07 |
| L27 | 211  | (statistic\$8 adj model\$8).ti.                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 14:10 |
| L28 | 303  | 382/228.ccls.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 14:12 |
| L29 | 890  | 382/239.ccls.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 14:11 |
| L30 | 0    | 28 and "709"/\$.ccls.                                | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 14:11 |
| L31 | 3    | 29 and "709"/\$.ccls.                                | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 14:11 |
| L32 | 95   | (1 near2 2) and 28                                   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 14:14 |

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| L33 | 63   | (1 near2 2) and 29   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 14:22 |
| L34 | 327  | 705/11.ccls.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 14:22 |
| L35 | 42   | (1 near2 2) and 34   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 14:26 |
| L36 | 1444 | 705/10.ccls.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 14:26 |
| L37 | 340  | 705/52.ccls.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 14:26 |
| L38 | 10   | "709"/\$.ccls. and "705"/\$.ccls. and<br>(statistic\$3 near2 model\$6)                                 | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 14:30 |
| L39 | 44   | "709"/\$.ccls. and "705"/\$.ccls. and<br>(1 near2 2)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 14:58 |
| L40 | 105  | (delet\$8 remov\$4 cancel\$8<br>eliminat\$8 eradicat\$8 eras\$8) with<br>(statistic\$5 near2 model\$8) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 15:31 |
| L41 | 2    | 40 same ((least near2 (recent\$5<br>use\$2)) old\$7 last)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 15:16 |
| L42 | 2    | 40 with ((least near2 (recent\$5<br>use\$2)) old\$7 last)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 15:22 |

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| L44 | 59  | (statistic\$5 near2 model\$8) with<br>((least near2 (recent\$5 use\$2))<br>old\$7 last)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 15:23 |
| L45 | 18  | (delet\$8 remov\$4 cancel\$8<br>eliminat\$8 eradicat\$8 eras\$8) with<br>(1 near2 2) with ((least adj<br>recent\$2) last old\$3 long\$3) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 15:34 |
| L46 | 94  | (replac\$5 updat\$7 chang\$5<br>exchang\$6) with (1 near2 2) with<br>((least adj recent\$2) last old\$3<br>long\$3)                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 15:43 |
| L47 | 5   | (1 near2 2) same ((full\$5 fill\$5)<br>near2 (cach\$4))  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 15:50 |
| L48 | 262 | (aggregat\$6) adj (table\$1)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 15:51 |
| L49 | 0   | 48 same 3  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 15:52 |
| L50 | 0   | 48 same 4  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 15:52 |
| L51 | 0   | 48 same 5  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 15:52 |
| L52 | 2   | 48 and 3   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 15:52 |
| L53 | 1   | 48 and 4   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 15:53 |

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| L54 | 3    | 48 and 5   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 15:54 |
| L55 | 20   | 48 and "709"/\$.ccls.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 15:56 |
| L56 | 38   | (histogram\$1) same (statistic\$3 adj<br>model\$5)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 16:00 |
| L57 | 16   | (histogram\$1) with (statistic\$3 adj<br>model\$5)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 16:07 |
| L58 | 2    | (57 56) and "709"/\$.ccls.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 16:01 |
| L59 | 1624 | memory with (pointer\$1) with<br>((least adj recent\$2) old\$6 last)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 16:33 |
| L60 | 101  | "709"/\$.ccls. and 59  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 16:13 |
| L61 | 45   | 60 and (array)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 16:17 |
| L62 | 46   | 60 and (array\$1)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 16:15 |
| L63 | 274  | ((first adj in adj first adj out) FIFO)<br>same (pointer\$1 with ((least most)<br>adj (recent\$2) old\$3 new\$3)) and<br>memory and index\$2 | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 16:26 |

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| L64 | 57   | ((first adj in adj first adj out) FIFO) same (pointers with ((least most) adj (recent\$2) old\$3 new\$3)) and memory and index\$2 | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 16:29 |
| L65 | 6    | ((first adj in adj first adj out) FIFO) same (pointers with ((least most) adj (recent\$2) old\$3 new\$3)).ab.                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 16:29 |
| L66 | 146  | ((first adj in adj first adj out) FIFO) same (pointers with ((least most) adj (recent\$2) old\$3 new\$3))                         | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 16:29 |
| L67 | 254  | cache with (pointers) with (((least most) adj recent\$2) old\$6 last new\$3 first)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 16:37 |
| L68 | 485  | cache same ((pointers) with (((least most) adj recent\$2) old\$6 last new\$3 first))  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 16:34 |
| L69 | 231  | cache with memory adj segment\$4  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 16:38 |
| L70 | 20   | 67.ab.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 16:38 |
| L71 | 38   | 69.ab.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 16:38 |
| S1  | 3926 | (statistic\$8 adj model\$8)   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 09:20 |
| S2  | 3419 | 709/224.ccls.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 09:20 |

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| S3  | 211     | S1.ti.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 09:20 |
| S4  | 691     | S1.ab.  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 09:20 |
| S5  | 40      | S3 and network\$5                                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 09:21 |
| S6  | 181     | S4 and network\$8                                       | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 09:21 |
| S7  | 3116993 | (statistic\$8 probabilit\$8 measur\$8<br>stochastic\$8) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 09:22 |
| S8  | 2350811 | model\$8 analyz\$8 graph\$8 profil\$8                   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 09:22 |
| S9  | 1215794 | updat\$8 aggregat\$8 accumul\$8                         | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 09:23 |
| S10 | 270487  | S7 and S8 and S9  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 09:34 |
| S11 | 18785   | S7 same S8 same S9                                      | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 09:36 |
| S12 | 1191    | 709/231.ccls.   | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 09:27 |

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| S13 | 1      | S3 and "709"/\$.ccls.                            | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 09:28 |
| S14 | 8      | S4 and "709"/\$.ccls.                            | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 09:28 |
| S15 | 86326  | S10 and network\$8                               | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 09:34 |
| S16 | 6756   | S11 and network\$8                               | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 09:38 |
| S17 | 202920 | S10 and (stream\$3 flow\$3 packet\$3 traffic\$4) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 09:38 |
| S18 | 13521  | S11 and (stream\$3 flow\$3 packet\$3 traffic\$4) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 09:36 |
| S19 | 2616   | (S7 near2 S8) same S9                            | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 09:37 |
| S20 | 1187   | (S7 near2 S8) with S9                            | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 09:37 |
| S21 | 451    | (S7 adj S8) with S9                              | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 09:37 |
| S22 | 959    | (S7 adj S8) same S9                              | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 09:37 |

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| S23 | 1932 | S19 and (stream\$3 flow\$3 packet\$3 traffic\$4)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 09:41 |
| S24 | 1204 | S19 and network\$8                                | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 09:38 |
| S25 | 355  | S21 and (stream\$3 flow\$3 packet\$3 traffic\$4)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 09:41 |
| S26 | 716  | S22 and (stream\$3 flow\$3 packet\$3 traffic\$4)  | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 09:42 |
| S27 | 151  | S22 same (stream\$3 flow\$3 packet\$3 traffic\$4) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 10:09 |
| S28 | 73   | S21 same (stream\$3 flow\$3 packet\$3 traffic\$4) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 10:03 |
| S29 | 156  | S20 same (stream\$3 flow\$3 packet\$3 traffic\$4) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 09:42 |
| S30 | 2    | "6484203".pn.                                     | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 09:57 |
| S31 | 412  | S19 same (stream\$3 flow\$3 packet\$3 traffic\$4) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 10:06 |
| S32 | 629  | (S7 near2 S8) with (real adj tim\$3)              | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 10:08 |

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| S33 | 73 | S32 same (stream\$3 flow\$3<br>packet\$3 traffic\$4) | US-PGPUB;<br>USPAT;<br>USOCR;<br>EPO; JPO;<br>DERWENT | OR | OFF | 2004/11/26 10:09 |
|-----|----|--|---|----|-----|------------------|

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Valentin Masero

March 2004 **Proceedings of the 2004 ACM symposium on Applied computing**Full text available: [pdf\(68.90 KB\)](#) Additional Information: [full citation](#)

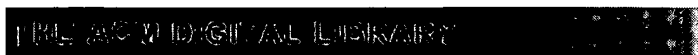
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### 1 [Posters: The limits of localization using RSS](#)

Eiman Elnahraway, Xiaoyan Li, Richard P. Martin

 November 2004 **Proceedings of the 2nd international conference on Embedded networked sensor systems**

 Full text available: pdf(34.31 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

We characterize the fundamental limits of localization using signal strength in indoor environments. Signal strength approaches are attractive because they are widely applicable to wireless sensor networks and do not require additional localization hardware. We show that although a broad spectrum of algorithms can trade accuracy for precision, none has a significant advantage in localization performance. We found that using commodity 802.11 technology over a range of algorithms, approaches an ...

**Keywords:** localization, wireless local area networks

### 2 [Routing and MAC: Energy-efficient forwarding strategies for geographic routing in lossy wireless sensor networks](#)

Karim Seada, Marco Zuniga, Ahmed Helmy, Bhaskar Krishnamachari

 November 2004 **Proceedings of the 2nd international conference on Embedded networked sensor systems**

 Full text available: pdf(624.02 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Recent experimental studies have shown that wireless links in real sensor networks can be extremely unreliable, deviating to a large extent from the idealized perfect-reception-within-range models used in common network simulation tools. Previously proposed geographic routing protocols commonly employ a maximum-distance greedy forwarding technique that works well in ideal conditions. However, such a forwarding technique performs poorly in realistic conditions as it tends to forward packets on ...

**Keywords:** blacklisting, geographic routing, wireless sensor networks

### 3 [Robust document image understanding technologies](#)

Henry S. Baird, Daniel Lopresti, Brian D. Davison, William M. Pottenger

 November 2004 **Proceedings of the 1st ACM workshop on Hardcopy document processing**

 Full text available: pdf(92.22 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

No existing document image understanding technology, whether experimental or commercially available, can guarantee high accuracy across the full range of documents of interest to industrial and government agency users. Ideally, users should be able to search, access, examine, and navigate among document images as effectively as they can among encoded data files, using familiar interfaces and tools as fully as possible. We are investigating novel algorithms and software tools at the frontiers ...

**Keywords:** OCR error management, document analysis, information retrieval

4 IR-KM-1 (information retrieval and knowledge management): text mining:  
Approximating the top-m passages in a parallel question answering system

Charles L. A. Clarke, Egidio L. Terra

November 2004 **Proceedings of the Thirteenth ACM conference on Information and knowledge management**

Full text available:  pdf(195.30 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

We examine the problem of retrieving the top- $m$  ranked items from a large collection, randomly distributed across an  $n$ -node system. In order to retrieve the top  $m$  overall, we must retrieve the top  $m$  from the subcollection stored on each node and merge the results. However, if we are willing to accept a small probability that one or more of the top- $m$  items may be missed, it is possible to reduce computation time by retri ...

**Keywords:** parallel information retrieval, question answering, ranking queries

5 DB-5 (databases): potpourri: On lossy time decompositions of time stamped documents

Parvathi Chundi, Daniel J. Rosenkrantz

November 2004 **Proceedings of the Thirteenth ACM conference on Information and knowledge management**

Full text available:  pdf(235.38 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Constructing time decompositions of time stamped documents is an important first step in extracting temporal information from a document set. Efficient algorithms are described for computing optimal lossy decompositions for a given document set, where the loss of information is constrained to be within a specified bound. A novel and efficient algorithm is proposed for computing information loss values required to construct optimal lossy decompositions. Experimental results are reported compar ...

**Keywords:** information loss, lossy decompositions, time decompositions

6 IR-4 (information retrieval): machine learning in information retrieval: Regularizing translation models for better automatic image annotation

Feng Kang, Rong Jin, Joyce Y. Chai

November 2004 **Proceedings of the Thirteenth ACM conference on Information and knowledge management**

Full text available:  pdf(250.23 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

The goal of automatic image annotation is to automatically generate annotations for images to describe their content. In the past, statistical machine translation models have been successfully applied to automatic image annotation task [8]. It views the process of annotating images as a process of translating the content from a 'visual language' to textual words. One problem with the existing translation models is that common words are usually associated with too many different image regions. ...

**Keywords:** automatic image annotation, normalized translation model, regularized translation model, translation model

7 IR-2 (information retrieval): web information retrieval: A practical web-based approach to generating topic hierarchy for text segments

Shui-Lung Chuang, Lee-Feng Chien

November 2004 **Proceedings of the Thirteenth ACM conference on Information and knowledge management**

Full text available:  pdf(351.23 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

It is crucial in many information systems to organize short text segments, such as keywords in documents and queries from users, into a well-formed topic hierarchy. In this paper, we address the problem of generating topic hierarchies for diverse text segments with a general and practical approach that uses the Web as an additional knowledge source. Unlike long documents, short text segments typically do not contain enough information to extract reliable features. This work investigates the p ...

**Keywords:** clustering, partitioning, search-result snippet, text segment, topic hierarchy generation, web data mining

8 KM-1 (knowledge management): clustering I: Using bi-modal alignment and clustering techniques for documents and speech thematic segmentations

Dalila Mekhaldi, Denis Lalanne, Rolf Ingold

November 2004 **Proceedings of the Thirteenth ACM conference on Information and knowledge management**

Full text available:  pdf(463.76 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

In this paper, we describe a new method for a simultaneous thematic segmentation of the meeting dialogs and the documents discussed or visible throughout the meeting. This bi-modal method is suitable for multimodal applications that are centered on documents, such as meetings and lectures, where documents can be aligned with meeting dialogs. Bringing into play this alignment, our bi-modal segmentation method first transforms its results into a set of nodes in a 2D graph space, where the two a ...

**Keywords:** k-means clustering, thematic alignment, thematic segmentation

9 DB-1 (databases): data integration: Organizing structured web sources by query schemas: a clustering approach

Bin He, Tao Tao, Kevin Chen-Chuan Chang

November 2004 **Proceedings of the Thirteenth ACM conference on Information and knowledge management**

Full text available:  pdf(323.72 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

In the recent years, the Web has been rapidly "deepened" with the prevalence of databases online. On this deep Web, many sources are *structured* by providing structured query interfaces and results. Organizing such structured sources into a domain hierarchy is one of the critical steps toward the integration of heterogeneous Web sources. We observe that, for structured Web sources, query schemas *ie*, attributes in query interfaces) are discriminative representative ...

**Keywords:** data integration, deep Web, hierarchical agglomerative clustering

**10 Experience with "link-up notification" over a mobile satellite link**

Martin Duke, Thomas R. Henderson, Jeff Meegan

July 2004 **ACM SIGCOMM Computer Communication Review**, Volume 34 Issue 3Full text available: [pdf\(429.96 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#)

Over paths characterized by extended outage periods, a TCP connection can suffer a severe performance penalty due to its Retransmission Timeout (RTO) backoff mechanism. If outages are long enough, the RTO can grow large enough to cause unacceptably long pauses when the link is eventually restored. One proposed solution is "Link-Up Notification" (LUN), which involves an intermediate device that can detect the link state. When the link is restored, the device immediately sends a packet that cau ...

**11 Topical web crawlers: Evaluating adaptive algorithms**

Filippo Menczer, Gautam Pant, Padmini Srinivasan

November 2004 **ACM Transactions on Internet Technology (TOIT)**, Volume 4 Issue 4Full text available: [pdf\(679.03 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Topical crawlers are increasingly seen as a way to address the scalability limitations of universal search engines, by distributing the crawling process across users, queries, or even client computers. The context available to such crawlers can guide the navigation of links with the goal of efficiently locating highly relevant target pages. We developed a framework to fairly evaluate topical crawling algorithms under a number of performance metrics. Such a framework is employed here to evalua ...

**Keywords:** Efficiency, evaluation, evolution, exploitation, exploration, reinforcement learning, topical crawlers

**12 Future of simulation: Role of WSC in simulation, panel: panel session: the future of the Winter Simulation Conference**

Daniel T. Brunner, James O. Henriksen, Ricki G. Ingalls, Mani S. Manivannan, Barry L. Nelson, Cindy Schiess

December 2003 **Proceedings of the 35th conference on Winter simulation: driving innovation**Full text available: [pdf\(360.70 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#)

The Winter Simulation Conference (WSC) is traditionally known as the most important annual conference serving the discrete event simulation community. The purpose of this panel session is to generate discussion about the nature of WSC in the future and about its future role in the overall simulation community. There are many reasons to do this. It is important to the communities currently served by WSC, critical to the conference itself, and in a broad sense significant to the future of simul ...

**13 Simulation education: Simulation textbooks - old and new, panel: simulation text books - old and new (panel)**

Thomas J. Schriber, Jerry Banks, Andrew F. Seila, Ingolf Ståhl, Averill M. Law, Richard G. Born

December 2003 **Proceedings of the 35th conference on Winter simulation: driving innovation**Full text available: [pdf\(595.56 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#)

In order to get more people to use simulation, improved teaching of simulation is important. In this context, textbooks and, more generally, teachware play a critical role. The panel looks at some of the older and successful textbooks as well as textbooks and teachware that are quite new and in some cases are still under development.

**14 Manufacturing applications: New manufacturing modeling methodology: a hybrid approach to manufacturing enterprise simulation**

Luis Rabelo, Magdi Helal, Albert Jones, Jason Min, Young-Jun Son, Abhijit Deshmukh  
December 2003 **Proceedings of the 35th conference on Winter simulation: driving innovation**

Full text available:  [pdf\(372.51 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#)

Manufacturing enterprise decisions can be classified into four groups: business decisions, design decisions, engineering decisions, and production decisions. Numerous physical and software simulation techniques have been used to evaluate specific decisions by predicting their impact on the system as measured by one or more performance measures. In this paper, we focus on production decisions, where discrete-event simulation models perform that evaluation. We argue that such an evaluation is I ...

**15 Modeling methodology a: Simulation of large scale networks II: development of an internet backbone topology for large-scale network simulations**

Michael Liljenstam, Jason Liu, David M. Nicol  
December 2003 **Proceedings of the 35th conference on Winter simulation: driving innovation**

Full text available:  [pdf\(180.57 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#)

A number of network simulators are now capable of simulating systems with millions of devices, at the IP packet level. With this ability comes a need for realistic network descriptions of commensurate size. This paper describes our effort to build a detailed model of the U.S. Internet backbone based on measurements taken from a variety of mapping sources and tools. We identify key attributes of a network design that are needed to use the model in a simulation, describe which components are av ...

**16 Analysis methodology: Issues on simulation and optimization II: robust hybrid designs for real-time simulation trials**

Russell C. H. Cheng, Owen D. Jones  
December 2003 **Proceedings of the 35th conference on Winter simulation: driving innovation**

Full text available:  [pdf\(337.51 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#)

Real time simulation trials involve people and are particularly subject to a number of natural constraints imposed by standard work patterns as well as to the vagaries of the availability of individuals and unscheduled upsets. They also typically involve many factors. Well thought-out simulation experimental design is therefore especially important if the resulting overall trial is to be efficient and robust. We propose hybrid experimental designs that combine the safety of matched runs with ...

**17 Analysis methodology: Queueing network simulation analysis: developing efficient simulation methodology for complex queueing networks**

Ying-Chao Hung, George Michailidis, Derek R. Bingham  
December 2003 **Proceedings of the 35th conference on Winter simulation: driving innovation**

Full text available:  [pdf\(490.13 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#)

Simulation can provide insight to the behavior of a complex queueing system by identifying the response surface of several performance measures such as delays and backlogs. However, simulations of large systems are expensive both in terms of CPU time and use of available resources (e.g. processors). Thus, it is of paramount importance to carefully select the inputs of simulation in order to adequately capture the underlying response surface of interest and at the same time minimize the requir ...

**18 Analysis methodology: Simulation of large networks: modeling and simulation of telecommunication networks for control and management**

John S. Baras

December 2003 **Proceedings of the 35th conference on Winter simulation: driving innovation**

Full text available:  pdf(812.19 KB) Additional Information: [full citation](#), [abstract](#), [references](#)

In this paper we describe methodologies for telecommunication networks modeling and simulation that are targeted to be useful as tools in on-line and off-line decision making of the type encountered in network control, management and planning problems. We describe the development, validation and use of self-similar and multi-fractal models, queuing control and performance evaluation, assessing the incremental utility of various models, hierarchical models based on aggregation, analytic approx ...

**19 Analysis methodology: Simulation output analysis: a wavelet-based spectral method for steady-state simulation analysis**

Emily K. Lada, James R. Wilson, Natalie M. Steiger

December 2003 **Proceedings of the 35th conference on Winter simulation: driving innovation**

Full text available:  pdf(242.72 KB) Additional Information: [full citation](#), [abstract](#), [references](#)

We develop an automated wavelet-based spectral method for constructing an approximate confidence interval on the steady-state mean of a simulation output process. This procedure, called WASSP, determines a batch size and a warm-up period beyond which the computed batch means form an approximately stationary Gaussian process. Based on the log-smoothed-periodogram of the batch means, WASSP uses wavelets to estimate the batch means log-spectrum and ultimately the steady-state variance constant ( ...

**20 Analysis methodology: Simulation input modeling: a flexible automated procedure for modeling complex arrival processes**

Michael E. Kuhl, Sachin G. Sumant, James R. Wilson

December 2003 **Proceedings of the 35th conference on Winter simulation: driving innovation**

Full text available:  pdf(506.96 KB) Additional Information: [full citation](#), [abstract](#), [references](#)

To automate the multiresolution procedure of Kuhl and Wilson for modeling and simulating arrival processes that exhibit long-term trends and nested periodic effects (such as daily, weekly, and monthly cycles), we present a statistical-estimation method that involves the following steps at each resolution level corresponding to a basic cycle: (*a*) transforming the cumulative relative frequency of arrivals within the cycle (for example, the percentage of all arrivals as a function ...

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## 1 Detection: Characterization of network-wide anomalies in traffic flows

Anukool Lakhina, Mark Crovella, Christiphe Diot

October 2004 **Proceedings of the 4th ACM SIGCOMM conference on Internet measurement**

Full text available:  pdf(125.66 KB)    Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Detecting and understanding anomalies in IP networks is an open and ill-defined problem. Toward this end, we have recently proposed the subspace method for anomaly diagnosis. In this paper we present the first large-scale exploration of the power of the subspace method when applied to flow traffic. An important aspect of this approach is that it fuses information from flow measurements taken throughout a network. We apply the subspace method to three different types of sampled flow traffic in ...

**Keywords:** anomaly detection, network traffic analysis

## 2 Providing transactional properties for migrating workflows

October 2004 **Mobile Networks and Applications**, Volume 9 Issue 5

Full text available:  pdf(138.89 KB)    Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Current workflow management systems have several limitations that need to be addressed by the research community. This paper deals with two of them: the lack of flexibility necessary in a changing business environment, and the lack of transactional guarantees for workflow applications.

To handle the dynamic character of current business environments and processes, we have proposed the Migrating Workflow Model. A migrating workflow transfers its code (specification) and its execution st ...


**Keywords:** migrating workflows, mobile environment, transactions, workflows

### 3 Timescales and stability: A non-intrusive, wavelet-based approach to detecting network performance problems

Polly Huang, Anja Feldmann, Walter Willinger

November 2001 **Proceedings of the 1st ACM SIGCOMM Workshop on Internet Measurement**

**Additional Information:**

Full text available:  pdf(3.01 MB)

[full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

The main objective of this paper is to explore how much information about the characteristics of end-to-end network paths can be inferred from relying solely on passive packet-level traces of existing traffic collected from a single tap point in the network. To this end, we show that a number of structural properties of aggregate TCP/IP packet traces reveal themselves and can be compared across different time periods and across paths of the traffic destined to different subnets by exploiting the ...

**Keywords:** energy function, network performance, passive measurements, scale-localization, wavelets

#### 4 Traffic characterization: Connection-level analysis and modeling of network traffic

Shriram Sarvotham, Rudolf Riedi, Richard Baraniuk

November 2001 **Proceedings of the 1st ACM SIGCOMM Workshop on Internet Measurement**

Full text available:  pdf(928.28 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Most network traffic analysis and modeling studies lump all connections together into a single flow. Such aggregate traffic typically exhibits long-range-dependent (LRD) correlations and non-Gaussian marginal distributions. Importantly, in a typical aggregate traffic model, traffic bursts arise from many connections being active simultaneously. In this paper, we develop a new framework for analyzing and modeling network traffic that moves beyond aggregation by incorporating connection-level info ...

**Keywords:** animal kingdom, network traffic modeling

#### 5 Modeling and performance evaluation of a cellular mobile network

Wei Li, Xiuli Chao

February 2004 **IEEE/ACM Transactions on Networking (TON)**, Volume 12 Issue 1

Full text available:  pdf(402.04 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

An analytic model of cellular mobile communications networks with instantaneous movement is investigated in this paper. This cellular mobile network is showed to be equivalent to a queueing network and furthermore the equilibrium distribution of this cellular mobile network is proved to have a product form. The explicit expressions for handoff rates of calls from one cell to another, the blocking probability of new calls and handoff calls are then obtained. Actual call connection time (ACCT) of ...

**Keywords:** actual call connection time (ACCT), call blocking and dropping probability, cellular mobile network, mobility, queueing network

#### 6 Educational environments: Maximising student exposure to networking using FreeBSD virtual hosts

Grenville Armitage

July 2003 **ACM SIGCOMM Computer Communication Review**, Volume 33 Issue 3

Full text available:  pdf(171.58 KB)

Additional Information: [full citation](#), [abstract](#), [references](#)

A Remote Unix Lab Environment (RULE) is being developed that allows student access to networked hosts for their coursework and research projects. This paper describes our first generation solution using FreeBSD's "jail" functionality to emulate many FreeBSD hosts on a small handful of physical machines. Our primary constraint is to minimise the incremental


infrastructure cost to the University. Students access the RULE hosts through pre-existing PC labs scattered around campus and 802.11-equipped ...

**Keywords:** FreeBSD, IP, Unix, networking, students, teaching, virtual hosts

7 Stream query processing II: Chain: operator scheduling for memory minimization in data stream systems

Brian Babcock, Shivnath Babu, Rajeev Motwani, Mayur Datar

June 2003 **Proceedings of the 2003 ACM SIGMOD international conference on Management of data**

Full text available:  pdf(299.62 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

In many applications involving continuous data streams, data arrival is bursty and data rate fluctuates over time. Systems that seek to give rapid or real-time query responses in such an environment must be prepared to deal gracefully with bursts in data arrival without compromising system performance. We discuss one strategy for processing bursty streams --- *adaptive, load-aware scheduling* of query operators to minimize resource consumption during times of peak load. We show that the cho ...

8 Communication network design using message flow simulation

David L. Bussard

December 1968 **Proceedings of the second conference on Applications of simulations**

Full text available:  pdf(221.38 KB) Additional Information: [full citation](#), [abstract](#), [index terms](#)

The determination of a near optimum cost-effective design for a large military communication network is a complex task. The detailed methods used in solving a particular network design problem will depend on the system requirements, the projected operational time frame, and on the time, money, and technical means available for its solution. Computer simulations of the operation of various possible networks under anticipated critical traffic loads and the determination thereby of the resulti ...

9 The use of web structure and content to identify subjectively interesting web usage patterns

Robert Cooley

May 2003 **ACM Transactions on Internet Technology (TOIT)**, Volume 3 Issue 2

Full text available:  pdf(540.06 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

The discipline of Web Usage Mining has grown rapidly in the past few years, despite the crash of the e-commerce boom of the late 1990s. Web Usage Mining is the application of data mining techniques to Web clickstream data in order to extract usage patterns. Yet, with all of the resources put into the problem, claims of success have been limited and are often tied to specific Web site properties that are not found in general. One reason for the limited success has been a component of Web Usage Mi ...

**Keywords:** Data mining, Web usage mining, World Wide Web

10 Enabling trusted software integrity

Darko Kirovski, Milenko Drinić, Miodrag Potkonjak

October 2002 **Proceedings of the 10th international conference on Architectural support for programming languages and operating systems**, Volume 37, 30, 36 Issue 10, 5, 5

Full text available:  pdf(1.39 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#)


Preventing execution of unauthorized software on a given computer plays a pivotal role in

system security. The key problem is that although a program at the beginning of its execution can be verified as authentic, while running, its execution flow can be redirected to externally injected malicious code using, for example, a buffer overflow exploit. Existing techniques address this problem by trying to detect the intrusion at run-time or by formally verifying that the software is not prone to a p ...

#### 11 Surveys: Continuous queries over data streams

Shivnath Babu, Jennifer Widom

September 2001 **ACM SIGMOD Record**, Volume 30 Issue 3

Full text available:  [pdf\(1.22 MB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

In many recent applications, data may take the form of continuous *data streams*, rather than finite stored data sets. Several aspects of data management need to be reconsidered in the presence of data streams, offering a new research direction for the database community. In this paper we focus primarily on the problem of query processing, specifically on how to define and evaluate *continuous queries* over data streams. We address semantic issues as well as efficiency concerns. Our ma ...

#### 12 PODS invited talk: Models and issues in data stream systems

Brian Babcock, Shivnath Babu, Mayur Datar, Rajeev Motwani, Jennifer Widom

June 2002 **Proceedings of the twenty-first ACM SIGMOD-SIGACT-SIGART symposium on Principles of database systems**

Full text available:  [pdf\(257.79 KB\)](#)


Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

In this overview paper we motivate the need for and research issues arising from a new model of data processing. In this model, data does not take the form of persistent relations, but rather arrives in multiple, continuous, rapid, time-varying *data streams*. In addition to reviewing past work relevant to data stream systems and current projects in the area, the paper explores topics in stream query languages, new requirements and challenges in query processing, and algorithmic issues.

#### 13 Column: A case for context-aware TCP/IP

Carey Williamson, Qian Wu

March 2002 **ACM SIGMETRICS Performance Evaluation Review**, Volume 29 Issue 4

Full text available:  [pdf\(1.55 MB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#)

This paper discusses the design and evaluation of CATNIP, a Context-Aware Transport/Network Internet Protocol for the Web. This integrated protocol uses application-layer knowledge (i.e., Web document size) to provide explicit context information to the TCP and IP protocols. While this approach violates the traditional layered Internet protocol architecture, it enables informed decision-making, both at network endpoints and at network routers, regarding flow control, congestion control, and pack ...

**Keywords:** TCP/IP, internet protocols, network emulation, network simulation, web performance

#### 14 The architecture of robust publishing systems

Marc Waldman, Aviel D. Rubin, Lorrie Faith Cranor

November 2001 **ACM Transactions on Internet Technology (TOIT)**, Volume 1 Issue 2

Full text available:  [pdf\(680.21 KB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

The Internet in its present form does not protect content from censorship. It is straightforward to trace any document back to a specific Web server, and usually directly to an individual. As we discuss below, there are valid reasons for publishing a document in a

censorship-resistant manner. Unfortunately, few tools exist that facilitate this form of publishing. We describe the architecture of robust systems for publishing content on the Web. The discussion is in the context of Publius, as that ...

**Keywords:** Censorship resistance, Web publishing

### 15 Real-time estimation of the parameters of long-range dependence

Matthew Roughan, Darryl Veitch, Patrice Abry

August 2000 **IEEE/ACM Transactions on Networking (TON)**, Volume 8 Issue 4

Full text available:  pdf(237.43 KB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

**Keywords:** Hurst parameter, estimation, fractal, long-range dependence, on-line, real-time, self-similar, traffic modeling, wavelets

### 16 Design and implementation of a web-based Internet performance management system using SNMP MIB-II

Seong Jin Ahn, Seung Keun Yoo, Jin Wook Chung

September 1999 **International Journal of Network Management**, Volume 9 Issue 5

Full text available:  pdf(842.57 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

This article is aimed at defining items of analysis using SNMP MIB-II for the purpose of analyzing the performance of Internet-based networks running on TCP/IP protocol, and then utilizing these items, in conjunction with various Web technology and JAVA, to design and implement a Web-based interface of a management system to analyze the performance of the Internet. Copyright © 2000 John Wiley & Sons, Ltd.

### 17 Linux in Enterprise Network Management

April 1999 **Linux Journal**

Full text available:  html(6.26 KB) Additional Information: [full citation](#), [abstract](#), [index terms](#)

Providing Network information to customers on an intranet saves both time and money for this international chemical company

### 18 A framework for robust measurement-based admission control

Matthias Grossglauser, David N. C. Tse


June 1999 **IEEE/ACM Transactions on Networking (TON)**, Volume 7 Issue 3

Full text available:  pdf(1.05 MB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

### 19 Mining in a data-flow environment: experience in network intrusion detection

Wenke Lee, Salvatore J. Stolfo, Kui W. Mok

August 1999 **Proceedings of the fifth ACM SIGKDD international conference on Knowledge discovery and data mining**

Full text available:  pdf(1.26 MB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

### 20 A cop on the beat: collecting and appraising intrusion evidence

Terrance Goan

July 1999 **Communications of the ACM**, Volume 42 Issue 7

Full text available:  [pdf\(195.58 KB\)](#)  
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### 1 [Detection: Characterization of network-wide anomalies in traffic flows](#)

Anukool Lakhina, Mark Crovella, Christiphe Diot

 October 2004 **Proceedings of the 4th ACM SIGCOMM conference on Internet measurement**

 Full text available: [pdf\(125.66 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Detecting and understanding anomalies in IP networks is an open and ill-defined problem. Toward this end, we have recently proposed the subspace method for anomaly diagnosis. In this paper we present the first large-scale exploration of the power of the subspace method when applied to flow traffic. An important aspect of this approach is that it fuses information from flow measurements taken throughout a network. We apply the subspace method to three different types of sampled flow traffic in ...

**Keywords:** anomaly detection, network traffic analysis

### 2 [Providing transactional properties for migrating workflows](#)

October 2004 **Mobile Networks and Applications**, Volume 9 Issue 5
 Full text available: [pdf\(138.89 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Current workflow management systems have several limitations that need to be addressed by the research community. This paper deals with two of them: the lack of flexibility necessary in a changing business environment, and the lack of transactional guarantees for workflow applications.

To handle the dynamic character of current business environments and processes, we have proposed the Migrating Workflow Model. A migrating workflow transfers its code (specification) and its execution st ...


**Keywords:** migrating workflows, mobile environment, transactions, workflows

### 3 [Timescales and stability: A non-intrusive, wavelet-based approach to detecting network performance problems](#)

Polly Huang, Anja Feldmann, Walter Willinger

 November 2001 **Proceedings of the 1st ACM SIGCOMM Workshop on Internet Measurement**

Additional Information:

Full text available:  [pdf\(3.01 MB\)](#)

[full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

The main objective of this paper is to explore how much information about the characteristics of end-to-end network paths can be inferred from relying solely on passive packet-level traces of existing traffic collected from a single tap point in the network. To this end, we show that a number of structural properties of aggregate TCP/IP packet traces reveal themselves and can be compared across different time periods and across paths of the traffic destined to different subnets by exploiting the ...

**Keywords:** energy function, network performance, passive measurements, scale-localization, wavelets

#### 4 Traffic characterization: Connection-level analysis and modeling of network traffic

Shriram Sarvotham, Rudolf Riedi, Richard Baraniuk

November 2001 **Proceedings of the 1st ACM SIGCOMM Workshop on Internet Measurement**

Full text available:  [pdf\(928.28 KB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Most network traffic analysis and modeling studies lump all connections together into a single flow. Such aggregate traffic typically exhibits long-range-dependent (LRD) correlations and non-Gaussian marginal distributions. Importantly, in a typical aggregate traffic model, traffic bursts arise from many connections being active simultaneously. In this paper, we develop a new framework for analyzing and modeling network traffic that moves beyond aggregation by incorporating connection-level info ...

**Keywords:** animal kingdom, network traffic modeling

#### 5 Modeling and performance evaluation of a cellular mobile network

Wei Li, Xiuli Chao

February 2004 **IEEE/ACM Transactions on Networking (TON)**, Volume 12 Issue 1

Full text available:  [pdf\(402.04 KB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

An analytic model of cellular mobile communications networks with instantaneous movement is investigated in this paper. This cellular mobile network is showed to be equivalent to a queueing network and furthermore the equilibrium distribution of this cellular mobile network is proved to have a product form. The explicit expressions for handoff rates of calls from one cell to another, the blocking probability of new calls and handoff calls are then obtained. Actual call connection time (ACCT) of ...

**Keywords:** actual call connection time (ACCT), call blocking and dropping probability, cellular mobile network, mobility, queueing network

#### 6 Educational environments: Maximising student exposure to networking using FreeBSD virtual hosts

Grenville Armitage

July 2003 **ACM SIGCOMM Computer Communication Review**, Volume 33 Issue 3

Full text available:  [pdf\(171.58 KB\)](#)

Additional Information: [full citation](#), [abstract](#), [references](#)

A Remote Unix Lab Environment (RULE) is being developed that allows student access to networked hosts for their coursework and research projects. This paper describes our first generation solution using FreeBSD's "jail" functionality to emulate many FreeBSD hosts on a small handful of physical machines. Our primary constraint is to minimise the incremental


infrastructure cost to the Univeristy. Students access the RULE hosts through pre-existing PC labs scattered around campus and 802.11-equipped ...

**Keywords:** FreeBSD, IP, Unix, networking, students, teaching, virtual hosts

7 Stream query processing II: Chain: operator scheduling for memory minimization in data stream systems

Brian Babcock, Shivnath Babu, Rajeev Motwani, Mayur Datar

June 2003 **Proceedings of the 2003 ACM SIGMOD international conference on Management of data**

Full text available:  pdf(299.62 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

In many applications involving continuous data streams, data arrival is bursty and data rate fluctuates over time. Systems that seek to give rapid or real-time query responses in such an environment must be prepared to deal gracefully with bursts in data arrival without compromising system performance. We discuss one strategy for processing bursty streams --- *adaptive, load-aware scheduling* of query operators to minimize resource consumption during times of peak load. We show that the cho ...

8 Communication network design using message flow simulation

David L. Bussard

December 1968 **Proceedings of the second conference on Applications of simulations**

Full text available:  pdf(221.38 KB) Additional Information: [full citation](#), [abstract](#), [index terms](#)

The determination of a near optimum cost-effective design for a large military communication network is a complex task. The detailed methods used in solving a particular network design problem will depend on the system requirements, the projected operational time frame, and on the time, money, and technical means available for its solution. Computer simulations of the operation of various possible networks under anticipated critical traffic loads and the determination thereby of the resulti ...

9 The use of web structure and content to identify subjectively interesting web usage patterns

Robert Cooley

May 2003 **ACM Transactions on Internet Technology (TOIT)**, Volume 3 Issue 2

Full text available:  pdf(540.06 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

The discipline of Web Usage Mining has grown rapidly in the past few years, despite the crash of the e-commerce boom of the late 1990s. Web Usage Mining is the application of data mining techniques to Web clickstream data in order to extract usage patterns. Yet, with all of the resources put into the problem, claims of success have been limited and are often tied to specific Web site properties that are not found in general. One reason for the limited success has been a component of Web Usage Mi ...

**Keywords:** Data mining, Web usage mining, World Wide Web

10 Enabling trusted software integrity

Darko Kirovski, Milenko Drinić, Miodrag Potkonjak

October 2002 **Proceedings of the 10th international conference on Architectural support for programming languages and operating systems**, Volume 37, 30, 36 Issue 10, 5, 5

Full text available:  pdf(1.39 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#)


Preventing execution of unauthorized software on a given computer plays a pivotal role in

system security. The key problem is that although a program at the beginning of its execution can be verified as authentic, while running, its execution flow can be redirected to externally injected malicious code using, for example, a buffer overflow exploit. Existing techniques address this problem by trying to detect the intrusion at run-time or by formally verifying that the software is not prone to a p ...

#### 11 Surveys: Continuous queries over data streams

Shivnath Babu, Jennifer Widom

September 2001 **ACM SIGMOD Record**, Volume 30 Issue 3

Full text available:  pdf(1.22 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

In many recent applications, data may take the form of continuous *data streams*, rather than finite stored data sets. Several aspects of data management need to be reconsidered in the presence of data streams, offering a new research direction for the database community. In this paper we focus primarily on the problem of query processing, specifically on how to define and evaluate *continuous queries* over data streams. We address semantic issues as well as efficiency concerns. Our ma ...

#### 12 PODS invited talk: Models and issues in data stream systems

Brian Babcock, Shivnath Babu, Mayur Datar, Rajeev Motwani, Jennifer Widom

June 2002 **Proceedings of the twenty-first ACM SIGMOD-SIGACT-SIGART symposium on Principles of database systems**

Full text available:  pdf(257.79 KB)


Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

In this overview paper we motivate the need for and research issues arising from a new model of data processing. In this model, data does not take the form of persistent relations, but rather arrives in multiple, continuous, rapid, time-varying *data streams*. In addition to reviewing past work relevant to data stream systems and current projects in the area, the paper explores topics in stream query languages, new requirements and challenges in query processing, and algorithmic issues.

#### 13 Column: A case for context-aware TCP/IP

Carey Williamson, Qian Wu

March 2002 **ACM SIGMETRICS Performance Evaluation Review**, Volume 29 Issue 4

Full text available:  pdf(1.55 MB)

Additional Information: [full citation](#), [abstract](#), [references](#)

This paper discusses the design and evaluation of CATNIP, a Context-Aware Transport/Network Internet Protocol for the Web. This integrated protocol uses application-layer knowledge (i.e., Web document size) to provide explicit context information to the TCP and IP protocols. While this approach violates the traditional layered Internet protocol architecture, it enables informed decision-making, both at network endpoints and at network routers, regarding flow control, congestion control, and pack ...

**Keywords:** TCP/IP, internet protocols, network emulation, network simulation, web performance

#### 14 The architecture of robust publishing systems

Marc Waldman, Aviel D. Rubin, Lorrie Faith Cranor

November 2001 **ACM Transactions on Internet Technology (TOIT)**, Volume 1 Issue 2

Full text available:  pdf(680.21 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

The Internet in its present form does not protect content from censorship. It is straightforward to trace any document back to a specific Web server, and usually directly to an individual. As we discuss below, there are valid reasons for publishing a document in a

censorship-resistant manner. Unfortunately, few tools exist that facilitate this form of publishing. We describe the architecture of robust systems for publishing content on the Web. The discussion is in the context of Publius, as that ...

**Keywords:** Censorship resistance, Web publishing

### 15 Real-time estimation of the parameters of long-range dependence

Matthew Roughan, Darryl Veitch, Patrice Abry

August 2000 **IEEE/ACM Transactions on Networking (TON)**, Volume 8 Issue 4

Full text available:  pdf(237.43 KB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

**Keywords:** Hurst parameter, estimation, fractal, long-range dependence, on-line, real-time, self-similar, traffic modeling, wavelets

### 16 Design and implementation of a web-based Internet performance management system using SNMP MIB-II

Seong Jin Ahn, Seung-Keun Yoo, Jin Wook Chung

September 1999 **International Journal of Network Management**, Volume 9 Issue 5

Full text available:  pdf(842.57 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

This article is aimed at defining items of analysis using SNMP MIB-II for the purpose of analyzing the performance of Internet-based networks running on TCP/IP protocol, and then utilizing these items, in conjunction with various Web technology and JAVA, to design and implement a Web-based interface of a management system to analyze the performance of the Internet. Copyright © 2000 John Wiley & Sons, Ltd.

### 17 Linux in Enterprise Network Management

April 1999 **Linux Journal**

Full text available:  html(6.26 KB) Additional Information: [full citation](#), [abstract](#), [index terms](#)

Providing Network information to customers on an intranet saves both time and money for this international chemical company

### 18 A framework for robust measurement-based admission control

Matthias Grossglauser, David N. C. Tse


June 1999 **IEEE/ACM Transactions on Networking (TON)**, Volume 7 Issue 3

Full text available:  pdf(1.05 MB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

### 19 Mining in a data-flow environment: experience in network intrusion detection

Wenke Lee, Salvatore J. Stolfo, Kui W. Mok

August 1999 **Proceedings of the fifth ACM SIGKDD international conference on Knowledge discovery and data mining**

Full text available:  pdf(1.26 MB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

### 20 A cop on the beat: collecting and appraising intrusion evidence

Terrance Goan

July 1999 **Communications of the ACM**, Volume 42 Issue 7

Full text available:  [pdf\(195.58 KB\)](#)  
 [html\(33.39 KB\)](#)

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# 1 [A pseudo-machine for packet monitoring and statistics](#)

R. T. Braden

 August 1988 **ACM SIGCOMM Computer Communication Review , Symposium proceedings on Communications architectures and protocols**, Volume 18 Issue 4

 Full text available: pdf(962.06 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

This paper concerns the design of a flexible and efficient packet monitoring program for analyzing traffic patterns and gathering statistics on a packet network. This monitor operates in real time, using an analyzer which is an interpretive pseudo-machine driving object-oriented data collection programs. The pseudo-program for the interpreter is "compiled" from configuration commands written in a monitoring control language.

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### 1 [Web Performance Optimization: Cluster-based online monitoring system of web traffic](#)

Yun Mao, Kang Chen, Dongsheng Wang, Weimin Zheng

November 2001 **Proceedings of the 3rd international workshop on Web information and data management**Full text available: pdf(453.72 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Web traffic has been increasing and evolving rapidly in recent years. It is important to measure the volume and characteristic of such dominant traffic to understand large-scale user access pattern and analyze performance of Web applications. Among the common methods of Web measurements, the passive way using packet monitoring is more advantageous since it provides comprehensive information and is transparent to end-users. However, the throughput of current packet monitoring system is limited by ...

### 2 [Bandwidth and traffic estimation techniques: A methodology for estimating interdomain web traffic demand](#)

Anja Feldmann, Nils Kammenhuber, Olaf Maennel, Bruce Maggs, Roberto De Prisco, Ravi Sundaram

October 2004 **Proceedings of the 4th ACM SIGCOMM conference on Internet measurement**Full text available: pdf(1.08 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

This paper introduces a methodology for estimating interdomain Web traffic flows between all clients worldwide and the servers belonging to over one thousand content providers. The idea is to use the server logs from a large content Delivery Network (CDN) to identify client downloads of content provider (i.e., publisher) Web pages. For each of these Web pages, a client typically downloads some objects from the content provider, some from the CDN, and perhaps some from third parties such as banner ...

**Keywords:** analysis, estimation, interdomain, traffic demand, traffic matrix, web

### 3 [Lessons learned: Strategies for sound internet measurement](#)

Vern Paxson

October 2004 **Proceedings of the 4th ACM SIGCOMM conference on Internet measurement**Full text available: pdf(153.14 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Conducting an Internet measurement study in a sound fashion can be much more difficult than it might first appear. We present a number of strategies drawn from experiences for

avoiding or overcoming some of the pitfalls. In particular, we discuss dealing with errors and inaccuracies; the importance of associating *meta-data* with measurements; the technique of calibrating measurements by examining outliers and testing for consistencies; difficulties that arise with large-scale me ...

**Keywords:** calibration, datasets, internet measurement, meta-data, reproducibility

4 Detection: BorderGuard: detecting cold potatoes from peers

Nick Feamster, Zhuoqing Morley Mao, Jennifer Rexford

October 2004 **Proceedings of the 4th ACM SIGCOMM conference on Internet measurement**

Full text available:  pdf(172.50 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Internet Service Providers often establish contractual "peering" agreements, where they agree to forward traffic to each other's customers at no cost. *Consistent route advertisement at all peering points* is a common provision in these agreements, because it gives an AS the flexibility to select egress points for the traffic (e.g., performing "hot potato" routing). Verifying "consistent export" is challenging because route advertisements are exchanged at multiple peering points ...

**Keywords:** BGP, anomalies, inconsistent advertisement, peering

5 Identification and classification: Class-of-service mapping for QoS: a statistical signature-based approach to IP traffic classification

Matthew Roughan, Subhabrata Sen, Oliver Spatscheck, Nick Duffield

October 2004 **Proceedings of the 4th ACM SIGCOMM conference on Internet measurement**

Full text available:  pdf(707.69 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

The ability to provide different Quality of Service (QoS) guarantees to traffic from different applications is a highly desired feature for many IP network operators, particularly for enterprise networks. Although various mechanisms exist for providing QoS in the network, QoS is yet to be widely deployed. We believe that a key factor holding back widespread QoS adoption is the absence of suitable methodologies/processes for appropriately mapping the traffic from different applications to diff ...

**Keywords:** class of service (CoS), quality of service (QoS), statistical signature, traffic classification

6 Applications: An analysis of Internet chat systems

Christian Dewes, Arne Wichmann, Anja Feldmann

October 2003 **Proceedings of the 3rd ACM SIGCOMM conference on Internet measurement**

Full text available:  pdf(630.55 KB) Additional Information: [full citation](#), [references](#), [citations](#), [index terms](#)

**Keywords:** IRC, chat, network measurements

7 Session 5: P2P and streaming: Analyzing peer-to-peer traffic across large networks

Subhabrata Sen, Jia Wang

November 2002 **Proceedings of the 2nd ACM SIGCOMM Workshop on Internet measurement**

Full text available:  pdf(1.56 MB)


Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

The use of peer-to-peer (P2P) applications is growing dramatically, particularly for sharing large video/audio files and software. In this paper, we analyze P2P traffic by measuring flow-level information collected at multiple border routers across a large ISP network, and report our investigation of three popular P2P systems -- FastTrack, Gnutella, and DirectConnect. We characterize the P2P traffic observed at a single ISP and its impact on the underlying network. We observe very skewed distrib ...

8 Traffic characterization: Characteristics of fragmented IP traffic on internet links

Colleen Shannon, David Moore, k claffy

November 2001 **Proceedings of the 1st ACM SIGCOMM Workshop on Internet Measurement**

Full text available:  pdf(2.36 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)


Fragmented IP traffic is a unique component of the overall mix of traffic on the Internet. Many assertions about the nature and extent of fragmented traffic are anecdotal rather than empirical. In this paper we examine the causes and attributes of measured fragment traffic and contrast those results with commonly cited beliefs. In particular, the effects of NFS, streaming media, networked video games, and tunneled traffic are quantified, and we estimate the prevalence of packet fragmentation due ...

**Keywords:** CoralReef, TCP/IP, fragment, fragmentation

9 A key recovery attack on the 802.11b wired equivalent privacy protocol (WEP)

Adam Stubblefield, John Ioannidis, Aviel D. Rubin

May 2004 **ACM Transactions on Information and System Security (TISSEC)**, Volume 7 Issue 2

Full text available:  pdf(207.38 KB)

Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)


In this paper, we present a practical key recovery attack on WEP, the link-layer security protocol for 802.11b wireless networks. The attack is based on a partial key exposure vulnerability in the RC4 stream cipher discovered by Fluhrer, Mantin, and Shamir. This paper describes how to apply this flaw to breaking WEP, our implementation of the attack, and optimizations that can be used to reduce the number of packets required for the attack. We conclude that the 802.11b WEP standard is completely ...

**Keywords:** Wireless security, wired equivalent privacy

10 Efficient use of workstations for passive monitoring of local area networks

J. Mogul

August 1990 **ACM SIGCOMM Computer Communication Review , Proceedings of the ACM symposium on Communications architectures & protocols**, Volume 20 Issue 4

Full text available:  pdf(1.46 MB)

Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Effective management of a local area network (LAN) requires not only a protocol to manage the active entities, but also a means to monitor the LAN channel. This is especially true in shared-channel LANs, such as Ethernet, where the behavior of the LAN as a whole may be impractical to deduce from the states of the individual hosts. Passive monitoring can be done using either a dedicated system or a general-purpose system. Dedicated monitors have been favored for several reasons, but recent w ...

11 Workload analysis: Accurate, scalable in-network identification of p2p traffic using application signatures

Subhabrata Sen, Oliver Spatscheck, Dongmei Wang

May 2004 **Proceedings of the 13th international conference on World Wide Web**

Full text available:  [pdf\(205.76 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

The ability to accurately identify the network traffic associated with different P2P applications is important to a broad range of network operations including application-specific traffic engineering, capacity planning, provisioning, service differentiation, etc. However, traditional traffic to higher-level application mapping techniques such as default server TCP or UDP network-port based disambiguation is highly inaccurate for some P2P applications. In this paper, we provide an efficient approach ...

**Keywords:** application-level signatures, online application classification, p2p, traffic analysis

12 Mobility: Improving web browsing performance on wireless pdas using thin-client computing

Albert M. Lai, Jason Nieh, Bhagyashree Bohra, Vijayarka Nandikonda, Abhishek P. Surana, Suchita Varshneya

May 2004 **Proceedings of the 13th international conference on World Wide Web**

Full text available:  [pdf\(433.53 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Web applications are becoming increasingly popular for mobile wireless PDAs. However, web browsing on these systems can be quite slow. An alternative approach is handheld thin-client computing, in which the web browser and associated application logic run on a server, which then sends simple screen updates to the PDA for display. To assess the viability of this thin-client approach, we compare the web browsing performance of thin clients against fat clients that run the web browser locally on a P ...

**Keywords:** thin-client computing, web performance, wireless and mobility

13 Analyzing peer-to-peer traffic across large networks

Subhabrata Sen, Jia Wang

April 2004 **IEEE/ACM Transactions on Networking (TON)**, Volume 12 Issue 2

Full text available:  [pdf\(616.51 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

The use of peer-to-peer (P2P) applications is growing dramatically, particularly for sharing large video/audio files and software. In this paper, we analyze P2P traffic by measuring flow-level information collected at multiple border routers across a large ISP network, and report our investigation of three popular P2P systems--FastTrack, Gnutella, and Direct-Connect. We characterize the P2P traffic observed at a single ISP and its impact on the underlying network. We observe very skewed distrib ...

**Keywords:** P2P, file sharing, peer-to-peer, traffic characterization, traffic measurement

14 Velnet: virtual environment for learning networking

Bruce Kneale, Ain Y. De Horta, Ilona Box

January 2004 **Proceedings of the sixth conference on Australian computing education - Volume 30**

Full text available:  [pdf\(616.15 KB\)](#) Additional Information: [full citation](#), [abstract](#), [references](#)

The problems of providing a real, physical specialist laboratory to teach computer

networking such as, the lack of funding and physical space and the risks and threats to the network environment and infrastructure, can be solved by the use of a virtual learning environment. Velnet is such a virtual learning environment that we have developed and used successfully. Velnet consists of one or more host machines and operating systems, commercial virtual machine software, virtual machines and their o ...

**Keywords:** Velnet, computer networking, virtual learning environment

15 Papers from Hotnets-II: Reverse engineering the Internet

Neil Spring, David Wetherall, Thomas Anderson

January 2004 **ACM SIGCOMM Computer Communication Review**, Volume 34 Issue 1

Full text available:  pdf(125.88 KB) Additional Information: [full citation](#), [abstract](#), [references](#)

To provide insight into Internet operation and performance, recent efforts have measured various aspects of the Internet, developing and improving measurement tools in the process. In this paper, we argue that these independent advances present the community with a startling opportunity: the collaborative reverse-engineering of the Internet. By this, we mean annotating a map of the Internet with properties such as: client populations, features and workloads; network ownership, capacity, connecti ...

16 Using certes to infer client response time at the web server

David Olshefski, Jason Nieh, Dakshi Agrawal

February 2004 **ACM Transactions on Computer Systems (TOCS)**, Volume 22 Issue 1

Full text available:  pdf(2.30 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

As businesses continue to grow their World Wide Web presence, it is becoming increasingly vital for them to have quantitative measures of the mean client perceived response times of their web services. We present Certes (CliEnt Response Time Estimated by the Server), an online server-based mechanism that allows web servers to estimate mean client perceived response time, as if measured at the client. Certes is based on a model of TCP that quantifies the effect that connection drops have on mean ...

**Keywords:** Web server, client perceived response time

17 Measuring and characterizing end-to-end Internet service performance

Ludmila Cherkasova, Yun Fu, Wenting Tang, Amin Vahdat

November 2003 **ACM Transactions on Internet Technology (TOIT)**, Volume 3 Issue 4

Full text available:  pdf(1.46 MB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Fundamental to the design of reliable, high-performance network services is an understanding of the performance characteristics of the service as perceived by the client population as a whole. Understanding and measuring such end-to-end service performance is a challenging task. Current techniques include periodic sampling of service characteristics from strategic locations in the network and instrumenting Web pages with code that reports client-perceived latency back to a performance server. Li ...

**Keywords:** End-to-end service performance, QoS, network packet traces, passive monitoring, reconstruction of web page composition, web site performance

18 Java implementation of policy-based bandwidth management

S. Jha, M. Hassan

July 2003 **International Journal of Network Management**, Volume 13 Issue 4

Full text available:  pdf(246.57 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

We describe a Java implementation of a policy based bandwidth management system using the standard policy protocols and an interface to the Linux Diffserv implementation. The useful features, such as extensibility and object orientation, of the Java implementation is illustrated by directly referring to the relevant programming codes. Through two practical experiments, we demonstrate the capability of our implementation in supporting policy-based dynamic resource allocations in enterprise network ...

## 19 Traffic engineering: Estimating flow distributions from sampled flow statistics

Nick Duffield, Carsten Lund, Mikkel Thorup

August 2003 **Proceedings of the 2003 conference on Applications, technologies, architectures, and protocols for computer communications**

Full text available:  pdf(333.29 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [index terms](#)

Passive traffic measurement increasingly employs sampling at the packet level. Many high-end routers form flow statistics from a sampled substream of packets. Sampling is necessary in order to control the consumption of resources by the measurement operations. However, knowledge of the statistics of flows in the *unsampled* stream remains useful, for understanding both characteristics of source traffic, and consumption of resources in the network. This paper provide methods that use flow sta ...

**Keywords:** IP flows, maximum likelihood estimation, packet sampling

## 20 Mobility & wireless access: Web browsing performance of wireless thin-client computing

S. Jae Yang, Jason Nieh, Shilpa Krishnappa, Aparna Mohla, Mahdi Sajjadpour

May 2003 **Proceedings of the twelfth international conference on World Wide Web**

Full text available:  pdf(239.90 KB) Additional Information: [full citation](#), [abstract](#), [references](#), [citations](#), [index terms](#)

Web applications are becoming increasingly popular for mobile wireless systems. However, wireless networks can have high packet loss rates, which can degrade web browsing performance on wireless systems. An alternative approach is wireless thin-client computing, in which the web browser runs on a remote thin server with a more reliable wired connection to the Internet. A mobile client then maintains a connection to the thin server to receive display updates over the lossy wireless network. To as ...

**Keywords:** thin-client computing, web performance, wireless and mobility

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**1 Statistical model of W-CDMA signals over realistic multipath channel**

*DongJin Oh; GueeSang Lee; DeokJai Choi; Cheol-Sung Kim;*  
 Vehicular Technology Conference, 2001. VTC 2001 Spring. IEEE VTS  
 53rd , Volume: 1 , 6-9 May 2001  
 Pages:347 - 351 vol.1

[\[Abstract\]](#)   [\[PDF Full-Text \(340 KB\)\]](#)   IEEE CNF

**2 Hybrid analytical-statistical modeling for efficiently exploring architecture and workload design spaces**

*Eeckhout, L.; De Bosschere, K.;*  
 Parallel Architectures and Compilation Techniques, 2001. Proceedings. 2001  
 International Conference on , 8-12 Sept. 2001  
 Pages:25 - 34

[\[Abstract\]](#)   [\[PDF Full-Text \(832 KB\)\]](#)   IEEE CNF

**3 Statistical modeling tools, methods and applications for integrated circuit manufacturability**

*Iravani, F.; Habu, M.; Khalily, E.;*  
 Microelectronic Test Structures, 1995. ICMTS 1995. Proceedings of the 1995  
 International Conference on , 22-25 March 1995  
 Pages:203 - 207

[\[Abstract\]](#)   [\[PDF Full-Text \(368 KB\)\]](#)   IEEE CNF

**4 An application of physics-based statistics in electrical engineering**

*Wheless, W.P., Jr.; Lehman, T.H.;*  
 Southeastcon '95. 'Visualize the Future', Proceedings., IEEE , 26-29 March 1995  
 Pages:199 - 205

[\[Abstract\]](#) [\[PDF Full-Text \(452 KB\)\]](#) IEEE CNF

---

**5 A characterization of neural network performances based on Fokker Planck statistical models**

*Colella, D.; Hriljac, P.; Jacyna, G.M.;*

Neural Networks for Ocean Engineering, 1991., IEEE Conference on , 15-17 A 1991

Pages:357 - 369

[\[Abstract\]](#) [\[PDF Full-Text \(600 KB\)\]](#) IEEE CNF

---

**6 Redesigning of JPEG statistical model in the lossy mode fitting distribution of DCT coefficients**

*Kuroki, Y.; Ueshige, Y.; Ohta, T.;*

Image Processing, 2000. Proceedings. 2000 International Conference on , Vol 3 , 10-13 Sept. 2000

Pages:825 - 828 vol.3

[\[Abstract\]](#) [\[PDF Full-Text \(332 KB\)\]](#) IEEE CNF

---

**7 A new RCS statistical model of radar targets**

*Xiaojian Xu; Peikang Huang;*

Aerospace and Electronic Systems, IEEE Transactions on , Volume: 33 , Issue 2 , April 1997

Pages:710 - 714

[\[Abstract\]](#) [\[PDF Full-Text \(548 KB\)\]](#) IEEE JNL

---

**8 Adaptive speckle reduction filter for log-compressed B-scan images**

*Dutt, V.; Greenleaf, J.F.;*

Medical Imaging, IEEE Transactions on , Volume: 15 , Issue: 6 , Dec. 1996

Pages:802 - 813

[\[Abstract\]](#) [\[PDF Full-Text \(2064 KB\)\]](#) IEEE JNL

---

**9 A statistical model for delay-fault testing**

*Park, E.S.; Mercer, M.R.; Williams, T.W.;*

Design & Test of Computers, IEEE , Volume: 6 , Issue: 1 , Feb. 1989

Pages:45 - 55

[\[Abstract\]](#) [\[PDF Full-Text \(708 KB\)\]](#) IEEE JNL

---

**10 Statistical modeling of MOS devices and ICs based on end-of-line manufacturing data**

*Zhang, Q.; Liou, J.J.; McMacken, J.; Stiles, K.; Thomson, J.; Layman, P.;*

Semiconductor Manufacturing Technology Workshop, 2000 , 14-15 June 2000

Pages:259 - 267

[\[Abstract\]](#) [\[PDF Full-Text \(452 KB\)\]](#) IEEE CNF

---

**11 A statistical model for path delay faults in VLSI circuits**

*Hamad, M.; Landis, D.;*

Southeastcon '96. 'Bringing Together Education, Science and Technology'.  
 Proceedings of the IEEE , 11-14 April 1996  
 Pages:388 - 392

[\[Abstract\]](#) [\[PDF Full-Text \(368 KB\)\]](#) [IEEE CNF](#)

#### 12 **Statistical models for land mobile and fixed satellite communication Ka band**

*Chun Loo;*

Vehicular Technology Conference, 1996. 'Mobile Technology for the Human Ra  
 IEEE 46th , Volume: 2 , 28 April-1 May 1996  
 Pages:1023 - 1027 vol.2

[\[Abstract\]](#) [\[PDF Full-Text \(300 KB\)\]](#) [IEEE CNF](#)

#### 13 **Impact of nMOS/pMOS gate length correlation on the accuracy of statistical modeling**

*Komatsubara, H.; Miura, N.; Hayashi, H.; Mochizuki, M.; Rukuda, K.; Yajima, Yoshida, R.; Wakayama, K.; Nishitani, A.; Nagatomo, Y.;*

Statistical Methodology, IEEE International Workshop on, 2001 6th. , 10 June

Pages:47 - 50

[\[Abstract\]](#) [\[PDF Full-Text \(312 KB\)\]](#) [IEEE CNF](#)

#### 14 **Statistical modeling techniques: FPV vs. BPV**

*Telang, N.; Higman, J.M.;*

Microelectronic Test Structures, 2001. ICMTS 2001. Proceedings of the 2001 International Conference on , 19-22 March 2001  
 Pages:71 - 75

[\[Abstract\]](#) [\[PDF Full-Text \(284 KB\)\]](#) [IEEE CNF](#)

#### 15 **Prediction based on backward adaptive recognition of local texture orientation and Poisson statistical model for lossless/near-lossless im compression**

*Xiaohui Xue; Wen Gao;*

Acoustics, Speech, and Signal Processing, 1999. ICASSP '99. Proceedings., 19 IEEE International Conference on , Volume: 6 , 15-19 March 1999  
 Pages:3137 - 3140 vol.6

[\[Abstract\]](#) [\[PDF Full-Text \(384 KB\)\]](#) [IEEE CNF](#)

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*Fogel, D.B.;*

Industrial Electronics Society, 1990. IECON '90., 16th Annual Conference of IEEE , 27-30 Nov. 1990

Pages:1211 - 1214 vol.2

[\[Abstract\]](#)
[\[PDF Full-Text \(340 KB\)\]](#)
**IEEE CNF**
2 **Validating connectionist implementations**
*Klyne, S.;*

Artificial Neural Networks, 1995., Fourth International Conference on , 26-28. 1995

Pages:228 - 233

[\[Abstract\]](#)
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**1 Traffic monitoring and information technology: the case of the Peruvian urban freeway**
*Filippi, F.; Guerriero, G.; Cecconi, C.; Mantovani, G.;*

Road Traffic Monitoring, 1989., Second International Conference on , 7-9 Feb

Pages:108 - 112

[\[Abstract\]](#)   [\[PDF Full-Text \(404 KB\)\]](#)   **IEEE CNF**
**2 An update on road traffic monitoring in the United States**
*McElhaney, D.R.;*

Road Traffic Monitoring and Control, 1994., Seventh International Conference on , 26-28 Apr 1994

Pages:111 - 114

[\[Abstract\]](#)   [\[PDF Full-Text \(268 KB\)\]](#)   **IEEE CNF**
**3 Variations on Ethernet traffic monitoring**
*Shang-Juh Kao;*

 TENCON '93. Proceedings. Computer, Communication, Control and Power Engineering.1993 IEEE Region 10 Conference on , Issue: 0 , 19-21 Oct. 1993  
 Pages:496 - 499 vol.1

[\[Abstract\]](#)   [\[PDF Full-Text \(200 KB\)\]](#)   **IEEE CNF**
**4 Performance characterizations of traffic monitoring, and associated control, mechanisms for broadband 'packet' networks**
*Berger, A.W.; Eckberg, A.E.; Hou, T.-C.; Lucantoni, D.M.;*

Global Telecommunications Conference, 1990, and Exhibition. 'Communication Connecting the Future', GLOBECOM '90., IEEE , 2-5 Dec. 1990

Pages:350 - 354 vol.1

[\[Abstract\]](#) [\[PDF Full-Text \(360 KB\)\]](#) IEEE CNF

### 5 **Second International Conference on Road Traffic Monitoring (Conf. I No.299)**

Road Traffic Monitoring, 1989., Second International Conference on , 7-9 Feb

[\[Abstract\]](#) [\[PDF Full-Text \(44 KB\)\]](#) IEE CNF

### 6 **A shadow handler in a video-based real-time traffic monitoring system** *Kilger, M.;*

Applications of Computer Vision, Proceedings, 1992., IEEE Workshop on , 30 Nov - 2 Dec. 1992

Pages:11 - 18

[\[Abstract\]](#) [\[PDF Full-Text \(876 KB\)\]](#) IEEE CNF

### 7 **Road traffic monitoring in Hong Kong**

*Lee, S.C.;*

Road Traffic Monitoring, 1989., Second International Conference on , 7-9 Feb

Pages:14 - 18

[\[Abstract\]](#) [\[PDF Full-Text \(384 KB\)\]](#) IEE CNF

### 8 **Traffic monitoring in Great Britain**

*Johnson, F.J.;*

Road Traffic Monitoring, 1989., Second International Conference on , 7-9 Feb

Pages:1 - 4

[\[Abstract\]](#) [\[PDF Full-Text \(284 KB\)\]](#) IEEE CNF

### 9 **HeliNet: a traffic monitoring cost-effective solution integrated with UMTS system**

*Dovis, F.; Mulassano, P.; Sellone, F.;*

Vehicular Technology Conference Proceedings, 2000. VTC 2000-Spring Tokyo. IEEE 51st , Volume: 3 , 15-18 May 2000

Pages:2360 - 2364 vol.3

[\[Abstract\]](#) [\[PDF Full-Text \(476 KB\)\]](#) IEEE CNF

### 10 **Improved illumination assessment for vision-based traffic monitoring**

*Wixson, L.; Hanna, K.; Mishra, D.;*

Visual Surveillance, 1998. Proceedings., 1998 IEEE Workshop on , 2 Jan. 1998

Pages:34 - 41

[\[Abstract\]](#) [\[PDF Full-Text \(60 KB\)\]](#) IEEE CNF

### 11 **Road traffic monitoring using the TRIP II system**

*Dickinson, K.W.; Wan, C.L.;*

Road Traffic Monitoring, 1989., Second International Conference on , 7-9 Feb

Pages:56 - 60

[\[Abstract\]](#) [\[PDF Full-Text \(560 KB\)\]](#) **IEE CNF**

**12 Autoguide-electronic route guidance for London and the UK**

*Belcher, P.L.; Catling, I.;*

Road Traffic Monitoring, 1989., Second International Conference on , 7-9 Feb

Pages:182 - 190

[\[Abstract\]](#) [\[PDF Full-Text \(688 KB\)\]](#) **IEE CNF**

**13 A telemetric monitoring and analysis system for use during large scale population evacuations**

*Southworth, F.; Chin, S.-M.; Cheng, P.D.;*

Road Traffic Monitoring, 1989., Second International Conference on , 7-9 Feb

Pages:99 - 103

[\[Abstract\]](#) [\[PDF Full-Text \(356 KB\)\]](#) **IEE CNF**

**14 Application of machine vision to traffic monitoring and control**

*Inigo, R.M.;*

Vehicular Technology, IEEE Transactions on , Volume: 38 , Issue: 3 , Aug. 1991

Pages:112 - 122

[\[Abstract\]](#) [\[PDF Full-Text \(840 KB\)\]](#) **IEEE JNL**

**15 Network traffic analysis and security monitoring with UniMon**

*Erhard, W.; Gutzmann, M.M.; Libati, H.M.;*

High Performance Switching and Routing, 2000. ATM 2000. Proceedings of the IEEE Conference on , 26-29 June 2000

Pages:439 - 446

[\[Abstract\]](#) [\[PDF Full-Text \(532 KB\)\]](#) **IEEE CNF**

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*Levy, W.B.;*

 Neural Networks, 1992. IJCNN., International Joint Conference on , Volume: 3  
 11 June 1992

Pages:341 - 346 vol.3

[\[Abstract\]](#)    [\[PDF Full-Text \(308 KB\)\]](#)    **IEEE CNF**
**2 Network statistics for computer-aided network analysis**
*Jessel, G.;*

Circuits and Systems, IEEE Transactions on [legacy, pre - 1988] , Volume: 20 , Issue: 6 , Nov 1973

Pages:635 - 641

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**3 Optimal segmentation of a VBR source for its parallel transmission over multiple ATM connections**
*Servetto, S.; Ramchandran, K.; Nahrstedt, K.; Ortega, A.;*

Image Processing, 1997. Proceedings., International Conference on , Volume: 2 , 26-29 Oct. 1997

Pages:5 - 8 vol.2

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**4 Adaptive quality of service for streamed MPEG-4 over the Internet**
*Cranley, N.; Murphy, L.;*

Communications, 2001. ICC 2001. IEEE International Conference on , Volume: 4 , 11-14 June 2001

Pages:1206 - 1210 vol.4

[\[Abstract\]](#) [\[PDF Full-Text \(552 KB\)\]](#) IEEE CNF

---

**5 Network analysis of a multi-node net with a tactical communication: protocol**

*Brand, J.; Brodeen, A.; Lopez, M.; Coleman, R.; Preston, K.;*  
Southeastcon '99. Proceedings. IEEE , 25-28 March 1999  
Pages:44 - 46

[\[Abstract\]](#) [\[PDF Full-Text \(316 KB\)\]](#) IEEE CNF

---

**6 Construction of high-efficient optical CDMA computer networks: statistical design**

*Muckenheim, J.; Iversen, K.; Hampicke, D.;*  
Communications, 1998. ICC 98. Conference Record.1998 IEEE International Conference on , Volume: 3 , 7-11 June 1998  
Pages:1289 - 1293 vol.3

[\[Abstract\]](#) [\[PDF Full-Text \(432 KB\)\]](#) IEEE CNF

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**7 A moment method for statistical analysis of high speed VLSI interconnects**

*Li, L.L.; Zhang, Q.J.; Nakhla, M.;*  
Custom Integrated Circuits Conference, 1994., Proceedings of the IEEE 1994 , May 1994  
Pages:305 - 308

[\[Abstract\]](#) [\[PDF Full-Text \(288 KB\)\]](#) IEEE CNF

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**8 A real-time monitor for token ring networks**

*Weaver, A.C.; McNabb, J.F.;*  
Military Communications Conference, 1989. MILCOM '89. Conference Record. 'Bridging the Gap. Interoperability, Survivability, Security'. , 1989 IEEE , 15-18 1989  
Pages:794 - 798 vol.3

[\[Abstract\]](#) [\[PDF Full-Text \(292 KB\)\]](#) IEEE CNF

---

**9 Analysis of the Pareto Model for Error Statistics on Telephone Circuits**

*Sussman, S.;*  
Communications, IEEE Transactions on [legacy, pre - 1988] , Volume: 11 , Issue: 2 , Jun 1963  
Pages:213 - 221

[\[Abstract\]](#) [\[PDF Full-Text \(688 KB\)\]](#) IEEE JNL

---

**10 Empirical characterization of wideband indoor radio channel at 5.3**

*Kivinen, J.; Xiongwen Zhao; Vainikainen, P.;*  
Antennas and Propagation, IEEE Transactions on , Volume: 49 , Issue: 8 , Aug 2001  
Pages:1192 - 1203

[\[Abstract\]](#) [\[PDF Full-Text \(524 KB\)\]](#) IEEE JNL

---

**11 Evaluation of methods for determining the mobile traffic distribution in cellular radio networks**

*Collmann, R.R.;*

Vehicular Technology, IEEE Transactions on , Volume: 50 , Issue: 6 , Nov. 2001  
Pages:1629 - 1635

[\[Abstract\]](#) [\[PDF Full-Text \(176 KB\)\]](#) IEEE JNL

---

**12 An efficient heuristic algorithm for channel assignment problem in cellular radio networks**

*Chakraborty, G.;*

Vehicular Technology, IEEE Transactions on , Volume: 50 , Issue: 6 , Nov. 2001  
Pages:1528 - 1539

[\[Abstract\]](#) [\[PDF Full-Text \(300 KB\)\]](#) IEEE JNL

---

**13 Channel holding time distribution in public telephony systems (PAM and PCS)**

*Barcelo, F.; Jordan, J.;*

Vehicular Technology, IEEE Transactions on , Volume: 49 , Issue: 5 , Sept. 2000  
Pages:1615 - 1625

[\[Abstract\]](#) [\[PDF Full-Text \(192 KB\)\]](#) IEEE JNL

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**14 Telecommunications in Russia**

*Sokolov, N.; Goldstein, B.;*

Communications Magazine, IEEE , Volume: 38 , Issue: 8 , Aug. 2000  
Pages:106 - 111

[\[Abstract\]](#) [\[PDF Full-Text \(548 KB\)\]](#) IEEE JNL

---

**15 Statistical analysis of crosstalk accumulation in WDM networks**

*Dorren, H.J.S.; de Waardt, H.; Monroy, I.T.;*

Lightwave Technology, Journal of , Volume: 17 , Issue: 12 , Dec. 1999  
Pages:2425 - 2430

[\[Abstract\]](#) [\[PDF Full-Text \(108 KB\)\]](#) IEEE JNL

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*Wu, S.F.; Kaiser, G.E.;*

Systems Management, 1993., Proceedings of the IEEE First International Workshop on , 14-16 April 1993

Pages:90 - 100

[\[Abstract\]](#)
[\[PDF Full-Text \(760 KB\)\]](#)
**IEEE CNF**

## 2 Integrated network management and control for interactive video tone networks

*Stinson, W.; Perry, P.; Kheradpir, S.;*

Network, IEEE , Volume: 9 , Issue: 5 , Sept.-Oct. 1995

Pages:70 - 80

[\[Abstract\]](#)
[\[PDF Full-Text \(912 KB\)\]](#)
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*Zhao Debin; Zhang Shixiong; Gao Wen;*

TENCON '93. Proceedings. Computer, Communication, Control and Power Engineering, 1993 IEEE Region 10 Conference on , Issue: 0 , 19-21 Oct. 1993

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